

Claims

I claim:

1. A multiplex electrical outlet receptacle comprising:

5 a housing containing a first electrical receptacle outlet, a second electrical receptacle outlet, a third electrical receptacle outlet, and a fourth electrical receptacle outlet;

a first tab extending from the top of the housing and a second tab extending from the bottom of the housing, the first and second tabs configured for connecting the housing to a permanently secured in-wall electrical box;

10 a single electrical cable connection on the housing, the single electrical cable connection providing a power supply for each of the first, second, third and fourth electrical receptacle outlets.

2. The multiplex electrical outlet receptacle of claim 1 further comprising:

15 a fifth electrical receptacle outlet in the housing wherein the single electrical cable connection provides a power supply for the fifth electrical receptacle outlet

3. The multiplex electrical outlet receptacle of claim 2 further comprising:

20 a sixth electrical receptacle outlet in the housing wherein the single electrical cable connection provides a power supply for the sixth electrical receptacle outlet.

4. The multiplex electrical outlet receptacle of claim 3 further comprising:

25 a plurality of additional receptacle outlets in the housing wherein the single electrical cable connection provides a power supply for each of the plurality of additional electrical outlets.

5. The multiplex electrical outlet receptacle of claim 1 further comprising:

30 a plurality of additional receptacle outlets in the housing wherein the single electrical cable connection provides a power supply for each of the plurality of additional electrical outlets.

6. The multiplex electrical outlet receptacle of claim 1 wherein each of the first, second, third and fourth electrical outlets have a common positive line bus and a common neutral line bus within the housing.

5 7. The multiplex electrical outlet receptacle of claim 6 wherein each of the first, second, third and fourth electrical outlets have a common ground bus within the housing.

8. The multiplex electrical outlet receptacle of claim 5 wherein each of the first, second, third, fourth and plurality of additional electrical outlets have a common positive line
10 bus and a common neutral line bus within the housing.

9. The multiplex electrical outlet receptacle of claim 5 wherein each of the first, second, third, fourth and plurality of additional electrical outlets have a common ground bus within the housing.

10. The multiplex electrical outlet receptacle of claim 1 wherein the first, second, third and fourth receptacle outlets include a first opening for connecting a plug to a positive line, a second opening for connecting the plug to a neutral line and a third opening for connecting the plug to a ground line.

11. The multiplex electrical outlet receptacle of claim 10 wherein the first receptacle outlet is positioned above the second receptacle outlet, and wherein the third opening in the first receptacle outlet is positioned above the first opening and the second opening in the first receptacle outlet and the third opening in the second receptacle outlet is positioned below the
25 first opening and the second opening in the second receptacle outlet.

12. A two-sided multiplex electrical receptacle for providing wall mounted outlets on both sides of a wall comprising:

- a receptacle housing having a first side and an opposing second side;
- 30 a first receptacle outlet positioned on the first side of the housing; and
- a second receptacle outlet positioned on the second side of the housing.

13. The two-sided multiplex electrical receptacle of claim 12 further comprising:
a third receptacle outlet positioned on the first side of the housing; and,
a fourth receptacle outlet positioned on the second side of the housing.

5 14. The two-sided multiplex electrical receptacle of claim 13 further comprising:
a fifth receptacle outlet positioned on the first side;
a sixth receptacle outlet positioned on the first side;
a seventh receptacle outlet positioned on the second side; and,
an eighth receptacle outlet positioned on the second side.

10 15. The two-sided multiplex electrical receptacle of claim 13 wherein each of the
first, second, third and fourth receptacle outlets are connected in common to a single cable
carrying a source of electrical energy.

15 16. The two-sided multiplex electrical receptacle of claim 12 further comprising:
a plurality of additional receptacle outlets positioned on the first side; and,
a plurality of additional receptacle outlets positioned on the second side.

20 17. The two-sided multiplex electrical receptacle of claim 16 wherein all of the
receptacle outlets on the first side of the housing and the second side of the housing are
connected in common to a single cable carrying a source of electrical energy.

25 18. The two-sided multiplex electrical receptacle of claim 12 further comprising:
a first mounting bracket connected to the housing proximate the first side for engaging
and securing the multiplex receptacle to an electrical junction box.

30 19. The two-sided multiplex electrical receptacle of claim 18 further comprising:
a second mounting bracket connected to the housing proximate the second side for
engaging and securing the multiplex receptacle to the electrical junction box.

20. The two-sided multiplex electrical receptacle of claim 16 further comprising
a first mounting bracket connected to the housing proximate the first side for engaging
and securing the multiplex receptacle to an electrical junction box; and,

a second mounting bracket connected to the housing proximate the second side for engaging and securing the multiplex receptacle to the electrical junction box.

21. An electrical box for mounting electrical receptacle outlets on both sides of a wall separating a first room and a second room comprising:

a metal frame configured for placement in a wall having a first side with an opening configured to expose a first electrical outlet and a second electrical outlet and a second side opposing the first side with an opening configured to expose a third electrical outlet and a fourth electrical outlet.

22. The electrical box of claim 21 further comprising a first mounting tab positioned proximate the first side for securing a first electrical receptacle having the first electrical outlet and the second electrical outlet.

23. The electrical box of claim 22 further comprising a second mounting tab positioned proximate the second side for securing a second electrical receptacle having the third electrical outlet and the fourth electrical outlet.

24. The electrical box of claim 21 wherein the opening in the first side is further configured to expose a fifth electrical outlet and a sixth electrical outlet.

25. The electrical box of claim 24 wherein the opening in the second side is further configured to expose a seventh electrical outlet and an eighth electrical outlet.

26. The electrical box of claim 21 wherein the opening in the first side is further configured to expose a plurality of additional outlets.

27. A multiplex receptacle adapter configured to accommodate a first transformer plug and a second transformer plug comprising:

a generally rectangular housing having a first side and an opposing second side;
a first plug blade extending outward from the back side of the housing and a second plug blade extending from the housing, the first plug blade and the second plug blade positioned to interconnect the adapter to a receptacle outlet connected to a source of electrical energy;

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a first adapter receptacle outlet positioned proximate a first end of the first side of the housing, and a second adapter receptacle outlet positioned proximate a second end of the first side of the housing wherein the first side of the housing is sized so that the first adapter receptacle outlet is separated from the second adapter receptacle outlet by a sufficient distance to concurrently accommodate a first transformer plug connected to the first adapter receptacle outlet, and a second transformer plug connected to the second adapter receptacle outlet.

28. The multiplex receptacle adapter of claim 27 further comprising a third adapter receptacle outlet positioned on the first side of the housing between the first adapter receptacle and the second adapter receptacle.

29. The multiplex receptacle adapter of claim 27 wherein the first adapter receptacle outlet includes a first slot for accepting a first blade of a first plug, a second slot for accepting a second blade of the first plug and a third slot for accepting a ground prong of the first plug, the first slot, second slot and third slot of the first adapter receptacle outlet being oriented in a first position, and the second adapter receptacle outlet includes a first slot for accepting a first blade of a second plug, a second slot for accepting a second blade of the second plug and a third slot for accepting a ground prong of the second plug, the first slot, second slot and third slot of the second adapter receptacle outlet being oriented in a second position different than the first position of the first adapter receptacle outlet.

30. The multiplex receptacle adapter of claim 29 wherein the third slot of the first adapter receptacle outlet is positioned above the first slot and the second slot of the first adapter receptacle outlet, and the third slot of the second adapter receptacle outlet is positioned below the first slot and the second slot of the second adapter receptacle outlet.

31. The multiplex receptacle adapter of claim 27 wherein the distance between the first adapter receptacle outlet and the second adapter receptacle outlet is five inches.

32. A multiplex receptacle adapter comprising:
a housing configured to have a generally rectangular box shape having a first front side and an opposing second rear side;

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a first plug prong extending from the second side of the housing and a second plug prong extending from the second side of the housing, the first and second prongs arranged to interconnect the adapter to a first removed receptacle outlet connected to a source of electrical energy;

5 a first adapter receptacle outlet on the first side of the housing having a first slot for receiving a first prong of a first plug, a second slot for receiving a second prong of the first plug, and a third slot for receiving a ground prong of the first plug, the first slot, second slot and third slot of the first adapter receptacle outlet having a first orientation; and,

10 a second adapter receptacle outlet on the first side of the housing having a first slot for receiving a first prong of a second plug, a second slot for receiving a second prong of the second plug, and a third slot for receiving a ground prong of the second plug, the first slot, second slot and third slot of the second adapter receptacle outlet having a second orientation different from the first orientation of the first slot, second slot and third slot of the first adapter receptacle outlet.

15 33. The multiplex receptacle adapter of claim 32 further comprising:

 a third adapter receptacle outlet on the first side of the housing having a first slot for receiving a first prong of a third plug, a second slot for receiving a second prong of the third plug, and a third slot for receiving a ground prong of the third plug, the first slot, second slot and third slot of the third adapter receptacle outlet having a third orientation.

20 34. The multiplex receptacle adapter of claim 33 wherein the third orientation is the same as the first orientation.

25 35. The multiplex receptacle adapter of claim 33 wherein the third orientation is different than the first orientation.

 36. The multiplex receptacle adapter of claim 35 wherein the third orientation is different than the second orientation.

30 37. The multiplex receptacle adapter of claim 33 further comprising:

 a fourth adapter receptacle outlet on the first side of the housing having a first slot for receiving a first prong of a fourth plug, a second slot for receiving a second prong of the fourth

plug, and a third slot for receiving a ground prong of the fourth plug, the first slot, second slot and third slot of the fourth adapter receptacle outlet having a fourth orientation.

38. The multiplex receptacle adapter of claim 37 wherein the fourth orientation is the same as the first orientation.

39. The multiplex receptacle adapter of claim 37 wherein the fourth orientation is different than the first orientation, the second orientation and the third orientation.

40. The multiplex receptacle adapter of claim 32 wherein when the adapter is positioned in an upright position the third slot of the first adapter receptacle outlet is positioned above the first slot and the second slot of the first adapter receptacle outlet, and the third slot of the second adapter receptacle outlet is positioned below the first slot and the second slot of the second adapter receptacle outlet.

41. The multiplex receptacle adapter of claim 32 wherein when the adapter is positioned in an upright position the third slot of the first adapter receptacle is positioned to the left of the first slot and the second slot of the first adapter receptacle outlet, and the third slot of the second adapter receptacle outlet is positioned to the right of the first slot and the second slot of the second adapter receptacle outlet.

42. The multiplex receptacle adapter of claim 33 wherein the first adapter receptacle outlet, the second adapter receptacle outlet and the third adapter receptacle outlet are positioned in a single row on the first side of the housing.

43. The multiplex receptacle adapter of claim 37 wherein the first adapter receptacle outlet, the second adapter receptacle outlet, the third adapter receptacle outlet, and the fourth adapter receptacle outlet are positioned in two rows on the first side of the housing.

44. The multiplex receptacle adapter of claim 43 wherein the housing includes a third plug prong extending from the second side of the housing and a fourth plug prong extending from the second side of the housing to allow the housing to connect to a second removed receptacle outlet connected to the source of electrical energy.

45. A multi-switch device comprising:

a housing configured for flush mounting in a wall;

a first switch contained in the housing, the first switch configured to control completion of a first circuit for providing electrical power to a first load;

5 a second switch contained in the housing, the second switch configured to control completion of a second circuit for providing electrical power to a second load; and,

a first line connection on the housing for connecting the first switch and the second switch to a first line associated with a source of electrical power.

10 46. The multi-switch device of claim 45 wherein the first line connection on the housing is connected to a neutral line associated with the source of electrical power.

47. The multi-switch device of claim 45 further comprising:

15 a second line connection on the housing for connecting the first switch and the second switch to a ground line associated with the source of electrical power.

48. The multi-switch device of claim 45 further comprising:

20 a first mounting tab extending from the housing for mounting the device in a wall mounted electrical box.

49. The multi-switch device of claim 47 further comprising:

a first internal bus in the housing connecting the first switch to the first line connection and the second switch to the first line connection.

25 50. The multi-switch device of claim 49 further comprising:

a second internal bus in the housing connecting the first switch to the second line connection and the second switch to the second line connection.

51. The multi-switch device of claim 45 further comprising:

30 a third switch contained in the housing, the third switch configured to control completion of a third circuit for providing electrical power to a third load, the third switch connected to the first line connection.

52. The multi-switch device of claim 45 further comprising:

a plurality of additional switches contained in the housing, the plurality of additional switches configured to control completion of a plurality of corresponding additional circuits for providing electrical power to a plurality of corresponding additional loads, each of the plurality of additional switches connected to the first line connection.

53. The multi-switch device of claim 45 wherein the first switch controls electrical power to a first light source, and the second switch controls electrical power to a second light source.

54. The multi-switch device of claim 45 wherein the housing includes a first side and an opposing second side, and wherein the first switch is positioned on the first side and the second switch is positioned on the second side.

55. The multi-switch device of claim 55 further comprising a third switch contained in the housing positioned on the first side of the housing, and a fourth switch contained in the housing positioned on the second side of the housing.

56. A multi-switch device for providing one or more switches on two sides of a common wall dividing a first room and a second room comprising:

a housing having a first side and an opposing second side separated from the first side a distance to span a depth of a wall common to a first location and an adjacent second location;

a first switch contained in the housing positioned on the first side, the first switch configured to control completion of a first circuit for providing electrical power to a first load; and,

a second switch contained in the housing positioned on the second side, the second switch configured to control completion of a second circuit for providing electrical power to a second load.

57. The multi-switch device of claim 56 further comprising:

a first line connection on the housing for connecting the first switch and the second switch to a first line associated with a source of electrical power.

58. The multi-switch device of claim 57 wherein the first line connection on the housing is connected to a neutral line associated with the source of electrical power.

59. The multi-switch device of claim 58 further comprising:
5 a second line connection on the housing for connecting the first switch and the second switch to a ground line associated with the source of electrical power.

60. The multi-switch device of claim 56 further comprising:
10 a first mounting tab extending from the housing for mounting the device in a wall mounted electrical box.

61. The multi-switch device of claim 59 further comprising:
15 a first internal bus in the housing connecting the first switch to the first line connection and the second switch to the first line connection.

62. The multi-switch device of claim 61 further comprising:
a second internal bus in the housing connecting the first switch to the second line connection and the second switch to the second line connection.

63. The multi-switch device of claim 56 further comprising:
20 a third switch contained in the housing positioned on the first side, the third switch configured to control completion of a third circuit for providing electrical power to a third load; and,

25 a fourth switch contained in the housing positioned on the second side, the fourth switch configured to control completion of a fourth circuit for providing electrical power to a fourth load.

64. The multi-switch device of claim 56 further comprising:
30 a first plurality of additional switches contained in the housing positioned on the first side, the first plurality of additional switches configured to control completion of a corresponding first plurality of circuits for providing power to a corresponding first plurality of loads; and,

a second plurality of additional switches contained in the housing positioned on the second side, the second plurality of additional switches configured to control completion of a corresponding second plurality of circuits for providing power to a corresponding second plurality of loads.

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65. The multi-switch device of claim 64 further comprising:

a first line connection on the housing for connecting the first switch, the second switch, the first plurality of additional switches, and the second plurality of additional switches to a first line associated with a source of electrical power.

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66. The electrical box of claim 21 wherein the box is configured to have an adjustable width.

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67. The electrical box of claim 66 comprises a sleeve arrangement for adjusting the width of the box.

68. A duplex electrical outlet receptacle comprising:

a housing containing a first electrical outlet having a first orientation and a second electrical outlet having a second orientation different from the first orientation; and,
a first flange for flush mounting the receptacle in a wall.

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69. A module comprising:

a housing containing a first electrical receptacle outlet and a first switch.

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70. The module of claim 69 further comprising a second electrical outlet in the housing.

71. The module of claim 69 further comprising a second switch in the housing.

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72. A module comprising:

a housing having a first side and a second opposing side;
a first electrical receptacle outlet contained in the housing on the first side; and,
a first switch contained in the housing on the second side.

73. The module of 72 further comprising:
a second switch contained in the housing on the first side.

74. The module of claim 73 further comprising:
a second electrical receptacle outlet contained in the housing on the second side.